#### APPENDIX B.

An Archaeological Clearance Survey

**Confidential Claim Retracted** 

Authorized by:

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of

Eight Parcels, of Land at the

.... Anaconda Company's Jackpile-Paguate Uranium Kine

Laguna Indian Reservation
Valencia County, New Mexico-

# RECEIVED

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U. S. Geological Survey
Carlsbad, N. M.

By

John .D. Beal ----

School of American Research

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## DESCRIPTION OF SURVEY

On November 6, 7, 10, and 12, 1975, the School of American Research conducted archaeological clearance surveys of eight parcels of land at the Amaconda Company's Jackpile-Paguate Uranium Mine on the Laguna Indian Reservation, Valencia County, New Mexico. The survey was performed under Federal Antiquities Permit # 74 NM 063 and a permit from the Laguna Tribe covering only those lands within the mining lease.

Dames and Moore, environmental consultants of Salt Lake City, Utah, requested that the School of American Research conduct the survey.

The areas surveyed are located within the Jackpile or Number Four Mining Leases of the Laguna Indian Reservation (Tlon, R5w, Sections 1, 2, 3, 4, 5, 8, 9, 10, and 16; Tlln, R5w, Sections 25, 26, 27, 33, 34, 35; and Tlon, R5w, Sections 3, 4, and 5 as shown on the accompanying map). The proposed expansion of Anaconda's open pit and underground uranium mining operations will affect these areas.

Mr. William E. Gray of the Anaconda Company and Mr. John Beal of the School of American Research met at the Jackpile-Paguate Mine on November 3, 1975, for the purpose of defining the survey areas and obtaining clearance from mine personnel. Mr. Beal returned to the lease area on November 6, accompanied by Mr. Christopher Causey with whom he began an intensive survey of the designated areas. Ms. Jane Whitmore participated in the survey on November 12.

# METHOD OF SURVEY

Each area was surveyed on foot in parallel linear transects with members of the survey team covering swaths of ground 50 feet in width (25 feet on either side of the line of passage). Crew members recorded signs of cultural activity, completed locational drawings of all site areas, made sketches of specific sites, and took complete sets of measurements. A small sample of ceramic materials (12 sherds) was collected at one site (Al-1). These materials, which were used in dating the site, will be returned to the Laguna Tribe. All prehistoric occupation sites were marked with yellow flagging tape, while historic occupation sites were left unmarked.

## DESCRIPTION OF SURVEY AREA

The areas surveyed lie on either side of the Rio Paguate, a perennial stream joining the Rio San Jose four miles east of Laguna Pueblo. The topography of the area is "characterized by a succession of mesas and erosion valleys bounded by desert cliffs or long barren slopes: a type of landscape which results from arid climate erosion of horizontal rocks of diverse strength" (Dittert 1959; Fenneman 1931:318). The Jackpile-Paguate Mine lies eight miles due north of Laguna Pueblo where the Rio Moquino and the Arroyo Moquino merge with the Rio Paguate. These three watercourses drain a considerable portion of the Mount Taylor watershed which lies to the north and west. The Arroyo Moquino serves to drain the west side of Gavilan Mesa, the most prominent landmark in the immediate area.

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The majority of the areas surveyed is marked by gently sloping, treeless, alluvial valleys which are cut by deeply entrenched arroyos and bordered by outcrops of cuprock, components of the Mesaverde Formation. Only the westernmost parcel (#7) differed from this norm; there the foothills of Mount Taylor rise to a considerable height (7,400 feet) and concentrated growths of pinon and juniper provide cover over the exceedingly rocky soil.

Valley bottoms below the mesas are populated by various grasses and low shrubs. Isolated small junipers occur where the caprock ends or where micro-environmental conditions permit. Cacti and members of the yucca family are not abundant. In comparison, the steep hillsides and mesa tops are typified by growths of pinon-juniper, various grasses, fourwing saltbush, prickly pear, and mamilaria cactus.

Mining operations in the vicinity have caused considerable impact on the original topography. Open pit mining operations, ancillary roads, backfill dumps, and drill holes are by far the most dominant features in all areas.

#### ARCHAEOLOGICAL BACKGROUND

Neither the Laguna Indian Reservation nor the general Paguate area has ever been the subject of detailed-archaeological investigation. While considerable work has been done to the south end west of the Laguna Reservation by A. E. Dittert (1949 and 1959), R. J. Ruppe (1953), and R. Wiseman (1974), their investigations deal with the Laguna area in a peripheral way. Some work has been done in the Paguate area, notably by Eastern New Mexico University under the direction of Cynthia

form, it is probable that it served as either a shrine or marker.

Survey Area A3

No materials of archaeological or historical significance were documented for this area.

# Survey Area A4

No materials of archaeological or historical significance were documented for this area.

## Survey Area A5

No materials of archaeological or historical significance were documented for this area.

# Survey Area A6

No materials of archaeological or historical significance were documented for this area.

## Survey Area 47

No materials of archaeological or historical significance were documented for this area.

# Survey Area A8

Three sites were located in this area, all of which were historic. The first (A8-1) appears to be a shrine area, while the second (A8-2) is an abandoned domicile. The third (A8-3) is a stock (goat) pen.

#### Site A8-1

This site is located on the east side of a small arroyo draining into Oak Canyon from the north and occupying a position in the center of the South Dump expansion. The site lies 20 meters southwest of the toe of the South Dump. A series of three stone cairns marks a pocket of deflation. Two additional stone cairns

it is probable that the last occupants were goats.

## RECOLMENDATIONS FOR CLEARANCE

The discovery of one prehistoric occupation site in the areas surveyed necessitates some action. The site has been directly impacted by the drilling of test holes in the vicinity and if further development of the area will result in additional surface alterations, mitigative steps will be necessary. Because this particular area is slated for underground mining, it is pensible that further damage can be avoided if all surface alterations are restricted. It is suggested that this alternative be considered. The immediate area now receives little traffic, and it is probable that if this trend can be continued, there will be little or no impact on the site.

The numerous historic sites in areas A-1, 2, and 8 are of no apparent archaeological significance; however, clearance from tribal officials should be gained before any are altered. This applies especially to those sites which may be shrined (sites A2-2 and A8-1), as they may have and continue to have considerable significance to the area's inhabitants. The following is a complete list of recommendations for clearance:

Area	Recommendation
Al	It is recommended that archaeological clearance be granted provided all land altering activities near site Al-1 are avoided. Further, clearance from tribal officials should be gained before any of the historic sites documented are destroyed or altered.
¥2	It is recommended that archaeological clearance be granted in area A2 provided tribal officials
• • •	are contacted with respect to sites A2-1 and A?-2.

Area	Recommendation
A3	It is recommended that archaeological clearance be granted for all of area A3.
A4	It is recommended that archaeological clearance be granted for all of area A4.
A5	It is recommended that archaeological clearence be granted for all of area A5.
A6	It is recommended that archaeological clearance be granted for all of area A6.
Α7	It is recommended that archaeological clearance be granted for all of area A7.
A8	It is recommended that archaeological clearance

### An Additional Note on Historic Sites

There may be some question as to whether some of the historic sites documented in the survey are of Navajo or Pueblo origin. No truly diagnostic materials were encountered which shed light on this point. Admittedly the masonry style of these structures is not even remotely similar to that observable in the town of Paguate or even in some of the outlying buildings. However, all corrals in the region appear to have been constructed in the same way (crude, simple, coursed masonry without mortar) no matter what their associations were with pueblo towns or other structures. While it is generally conceded that both Navajos and Pueblos utilized the area, there is considerable confusion as to who did what, where, and to whom such structures may be attributed (Littel and Graham).